

Title (en)

Metal frame arrangement and process for producing same.

Title (de)

Metallrahmenanordnung und Verfahren zu deren Herstellung.

Title (fr)

Arrangement d'un châssis en métal et procédé pour sa fabrication.

Publication

EP 0305352 A2 19890301 (EN)

Application

EP 88850276 A 19880823

Priority

NO 873552 A 19870824

Abstract (en)

A metal frame arrangement (20, 21), for use as or in door frames, window frames (22), window casements (23) or the like, comprises a frame made of concave metal profile. The frame (20, 21) comprises two pairs of mutually opposite frame portions which are angled at right angles relative to the adjacent neighbouring frame portion. The frame (20, 21) is made into a coherent piece in a longitudinal continuous and sectionally angled contour, by means of local cavities (31, 35) in the metal profile and longitudinal deformation of locally uncovered portions (32, 36, 37) of the metal profile, the deformation by means of the material of the metal profile forming angle reinforcing and angle bracing means (32', 38) just by the apex of the angle between two neighbouring frame portions. A process for the production of the metal frame (20, 21) comprises that cavities (31, 35) in a side portion or side portions of the profile are removed, after which a section of web portion (20c) or one web portion (21f) of the profile uncovered by the cavity (31, 35) is finished to form an angle bracing and angle reinforcing means (32', 38) for establishing frame portions angled at right angles relative to each other. The angle bracing is effected simultaneously with the undertaking of the angle bending of the frame plate.

IPC 1-7

E06B 3/12; E06B 3/96

IPC 8 full level

E06B 3/12 (2006.01); **E06B 3/96** (2006.01)

CPC (source: EP KR US)

E06B 3/06 (2013.01 - KR); **E06B 3/96** (2013.01 - EP US)

Citation (applicant)

- GB 1394578 A 19750521 - STANDARD PRODUCTS CO
- AT 333016 B 19761025 - VOEST AG [AT]

Cited by

US5295292A; US5361476A; US5313761A; EP0553642A3; US5678377A; US8143551B2; US8164023B2; WO2008092701A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0305352 A2 19890301; EP 0305352 A3 19900801; EP 0305352 B1 19930113; AT E84596 T1 19930115; AU 2153088 A 19890302; CN 1034778 A 19890816; DE 3877466 D1 19930225; DK 470988 A 19890225; DK 470988 D0 19880823; JP H01146093 A 19890608; KR 890004042 A 19890419; NO 162126 B 19890731; NO 162126 C 19891108; NO 873552 D0 19870824; NO 873552 L 19890227; US 4937996 A 19900703

DOCDB simple family (application)

EP 88850276 A 19880823; AT 88850276 T 19880823; AU 2153088 A 19880824; CN 88107061 A 19880823; DE 3877466 T 19880823; DK 470988 A 19880823; JP 21039588 A 19880824; KR 880010763 A 19880824; NO 873552 A 19870824; US 23333888 A 19880817